

The Insider

www.senate.mi.gov/switalski

Inside State Politics with State Senator Mickey Switalski Senate District 10

January 7, 2005

Welcome to the electronic version of *The Insider*. I would like to take the opportunity to thank you for your support and giving me an opportunity to represent you in the Michigan Senate. It is my sincere hope that this bi-weekly e-newsletter will keep you informed of the happenings in Lansing while staying true to the traditional style of *The Insider*. If you would like to contact me, please feel free to e-mail me at senmswitalski@senate.michigan.gov or call me at my Roseville or Lansing office. You can also meet me in person during my constituent hours, coming to a library near you. Call my office and make an appointment or just walk in. See schedule for details.

That Sinking Feeling

"Hey Dad. You know that sinkhole?" wondered my son Liam, age 11. "What happened?"

"I'm glad you asked that question, son," I replied. "Lucky for you, I've toured that sinkhole four times.

"On August 27th, a portion of 15 Mile Road between Hayes and Schoenherr began to sink. Within a very short time, a 40-foot deep crater developed, causing the roadway above it to collapse, and nibbling perilously close to houses on the south side of 15 Mile. A second, smaller hole developed about 100 yards westward, maybe 25 feel deep. It was as if someone had pulled a plug and the earth was being sucked down a bottomless drain.

"All this was caused by a broken sewer pipe. Most people just flush wastewater down the drain and don't consider where it goes. Please allow me to describe what complex engineering is involved in fixing that pipe.

"Let's start with jurisdiction. The site is under the authority of the Detroit Water and Sewerage Department, or DWSD, and it has had lots of contractors-specialists from all over the country-working on it. They average about 60 people out there working 24/7 since the problem began. The City of Sterling Heights is the host of the site, and they protect the interests of the residents and coordinate with the DWSD. The state also has a regulatory function in terms of health and safety and the environment, and everyone works cooperatively to solve the problem."

"I ask you what time it is, and you tell me how to build a watch."

"OK, smart guy. Here's what happened. Sixty feet below the surface of the ground, a huge concrete sewage pipe, 11 feet in diameter, ruptured. As raw sewage gushed from the broken pipe, it eroded the dirt surrounding the pipe. So began the great settling process that eventually created the giant sinkhole."

"So why didn't they just fill it back up?"

"Because all that would have sunk, too. It's like quicksand until you fix the source. First they had to stop the leak, and then stabilize the walls of the hole so it didn't get any bigger."

"I may regret this, but what did that involve?"

"They had to pound sheets of steel, like seawall, deep into the ground to keep the hole from getting any closer to people's houses. They had to drill into the ground with a spinning drill that shoots grout, a kind of liquid cement, at high pressure out the side as it goes down. That had the effect of creating cement pillars ten feet in diameter. They made about 18 of these, bisecting 15 Mile Road with about one foot between each column to stabilize the earth and allow limited migration of groundwater."

"That's all simply fascinating, Dad," said Liam. "Why don't they just dig down to the pipe and fix it so we can end this discussion."

"As much as you might like that, it is not that simple," I explained. "But you've posed a legitimate question. It's been four months now, and the repair has not been completed. Neighbors in the area have had to suffer the inconvenience of closed roads, noise, odor, and construction traffic. The City of Sterling Heights has worked hard to accommodate the residents, and city officials have had nothing but praise for the cooperation and professionalism of the DWSD, which is in charge of the repair."

"So what's taking so long?"

"Liam," I waxed, "to visit the site is to encounter an engineering project that rivals the construction of the Super Conducting Super Collider. I've already described the actions taken to stabilize the ground. Concurrently, the project managers acted to maintain sewage service-600 million gallons of sewage a day have to travel from Schoenherr to Hayes, but the pipe was broken. So they had to bypass the break. That means pumping all that sewage up to the surface, running it the better part of a mile alongside the break, before submerging it to the depths to link with the old pipe again.

"And that had to be done immediately, because the longer you wait, the more erosion and sinking you get. And if the broken pipe collapsed and completely stopped flowing, you would get a major sewage backup. And when sewage backs up there's only one place for it to go.

"That would be a basement near you."

"So what's the big deal? Put in a bypass. We do it to heart patients all the time."

"Well, yes, we do. But it's a big deal when we do it there, too. And by the way, we better not just do one bypass. Because if that one fails, think one word again-basement."

"Wait a minute," Liam cried, alarmed for the first time. "My Nintendo's down there."

"Don't worry," I added. "That's why they did two bypass lines. They installed a 36- and a 24-inch pump, and they have replacements on hand, and two sets of pumps. The first sets ran on diesel and were loud and smelly. Since then, Edison ran power to the site, and the pumps are electric and quieter. But they kept the diesels, as a back up. And they run them for a short period once a day to make sure they don't freeze up. That wouldn't be much good in an emergency, would it?"

"Not when Godzilla Destroy all Monsters Melee is at risk."

"Right. Now as you can see, you need a lot of redundancies and backups in case of an emergency. And just in case everything went wrong, there was a final fail-safe option. If basements and video games were truly in jeopardy, the sewage could be diverted straight to the Red Run Drain a quarter mile away and treated with a large does of chlorine on the spot. All that is ready, too."

"I feel much better now," sighed Liam, turning toward the bathroom.

"Halt!" I shouted. "Hands high and step away from the toilet. Slowly."

He stepped gingerly away and glanced nervously at the plunger, standing menacingly in the corner.

"A funny thing happened as they dug down toward the pipe," I continued. "The whole area kept filling up with water. There's a huge retention pond just southeast of the site, and water was migrating into the hole from the surrounding high water table. So hydrologists had to dewater the entire area. They continue to pump groundwater out of the site on a daily basis. You'd be amazed at how clean it looks when it comes to the surface."

"Fascinating," he said, evenly. "So that's it, then? We're done?

"Please remove your finger from that commode handle. We still have to fix the broken pipe, remember?"

"Oh yes," Liam recalled, scratching his head. "I knew there was a reason for all this."

"Now this is the good part," I warned him. "How would you like to climb down into that hole and fix that pipe?"

"Is this a trick question?"

"You just slide down the side on one of your boogie boards and slap a bandaid on the pipe, right."

"Sure, and have the sink hole suck me under and five tons of dirt cave in on top of me."

"Exactly. You wouldn't think it in this day and age, but 44 workers were killed in the U.S. by cave-ins last year. I'll bet most were down less than 60 feet, too. It is very dangerous work. That's why we have Occupational Safety and Heath, or OSHA standards. So here's what they've done. I already told about pounding in the steel sheeting and the grouting to stabilize the area. To get at the broken pipe itself, they've had to drill a hole about three feet in diameter, perfectly straight down, and then lower a steel "I" beam 65-feet long into that hole. Then they pump cement down two tubes attached to the beam, so the beam sits in cement. And they fill the three-foot hole with cement so the beam is encased in cement."

"Wow."

"They do that 262 times in a rectangle around the area of the broken pipe. Then they scrape the cement from sections of the "I" beam and weld cross beams from side to side. It creates a reinforced cage for the men to work in as they uncover and replace the pipe.

"Double wow."

"They even lowered a steam shovel into the hole through the frame."

"Now can I go?"

'Wait," I told him. "There's more."

"I'm sure there is, Dad," Liam observed philosophically. "But I've been here wondering about something else. Did you know that the Nintendo 64 is so named because it was the first system to run on 64 frames of graphics?"

"No, I didn't, Liam," I replied. "What's a frame of graphics?"

Mickey's TV Insider Show

Check out my TV Insider Show coming to a television station near you. Watch me interview local guests about politics, life, issues and concerns to our district.

Sterling Heights

Every Saturday and Sunday at 12:30 p.m. (Comcast Channel 5/WOW Channel 10)

Clinton Township

Last week of every month- Sat thru Thurs (Comcast Channel 5/WOW Channel 10)

Utica

Every Wednesday at 9 a.m.

(Comcast Channel 5/WOW Channel 10)

Roseville

Every other Tuesday at 6:05 p.m. (Comcast Channel 18)

Township will show the TV Insider Show of

*Please note that Sterling Heights/Utica/Clinton Township will show the TV Insider Show on Comcast Channel 5 and Wide Open West Channel 10. Clinton Township will air the TV Insider Show at various times during the last week of every month. Roseville can see the TV Insider Show on Comcast Channel 18.

Coffee Hours

*Please note that since the District Office is in Roseville, I do not have set coffee hours in Roseville. However, I encourage you to visit the Roseville office. We even have a coffee pot. Everyone is welcome to attend the coffee hours and discuss their issues and concerns.

Jan. 10 7-9 p.m.	Jan. 31 7-9 p.m.
Location: Sterling Heights Public Library	Location: Clinton-Macomb Public Library
(40255 Dodge Park)	(40900 Romeo Plank Road, south of Canal)
Sterling Heights	Clinton Township

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Lansing Office

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